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FORT COLLINS, CO 80527-2400

EXAMINER

TERMANINI, SAMIR

ART UNIT	PAPER NUMBER
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2178

NOTIFICATION DATE	DELIVERY MODE
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05/15/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/667,473

Applicant(s)

HUNT, SIMON DEREK

Examiner

Samir Termanini

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 1/9/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-28, 30-39 and 41-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-28, 30-39 and 41-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

BACKGROUND

1. This Final Office Action is responsive to the following communications:
Amendment filed on 7/18/2007.

2. Claims 1-12, 14-28, 30-39 and 41-45 are pending. Claims 1, 12, 17, 28, 33, 39 and 44 are independent in form.

RESPONSE TO AMENDMENT

3. Claims 1-12, 14-28, 30-39 and 41-45 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2004/0243616 (*Benhase et al*).

4. The 37 C.F.R. §1.131 declaration filed on 1/9/2008 under 37 CFR 1.131 has been considered but is ineffective to overcome the *Benhase et al* reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the *Benhase et al* reference to either a constructive reduction to practice or an actual reduction to practice. The declaration is vague and contains general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice.

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice “amounts essentially to mere pleading, unsupported by proof or a showing of facts” and, thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit “asserts that facts exist but does not tell what they are or when they occurred.”).

CLAIM REJECTIONS-35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-12, 14-28, 30-39 and 41-45** are rejected under 35 U.S.C. 102(e) as being anticipated by *Benhase et al.* (Pub No. 2004/0243616 A1).

I. Citation of Prior Art

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples¹. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art². Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed.

II. General Discussion of the Applied Prior Art.

Benhase et al. disclose a user interface for a computer system that provides a display of a tree and corresponding table, e.g., a "treetable" display. The tree is updated based on filter and sort operations applied to the table. Tree nodes may represent storage resources of a computer system such as a storage server, logical storage resources, volumes, disks, and the like. Filtering may be based on storage resource

¹ *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

² *Upsher-Smith Labs. v. Pamlab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d

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identifier, storage resource size, copy type, copy status, copy progress, and characteristics of a copy relationship, such as an identifier of another storage resource that is a source or target resource for copying. The table is updated to display only the information associated with the child nodes that meet the filtering conditions, and their parent nodes, while omitting the information for remaining nodes. Rows of the table displaying information for multiple copy relationships associated with a node remain grouped after sorting or filtering. For clarity, Fig. 3 of Applicant's specification is shown with Fig. 4 of *Benhase et al.*, below:

FIG. 3

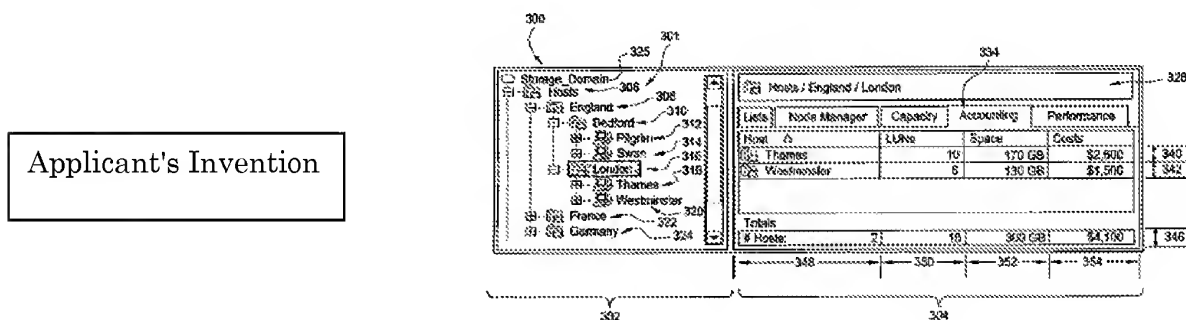
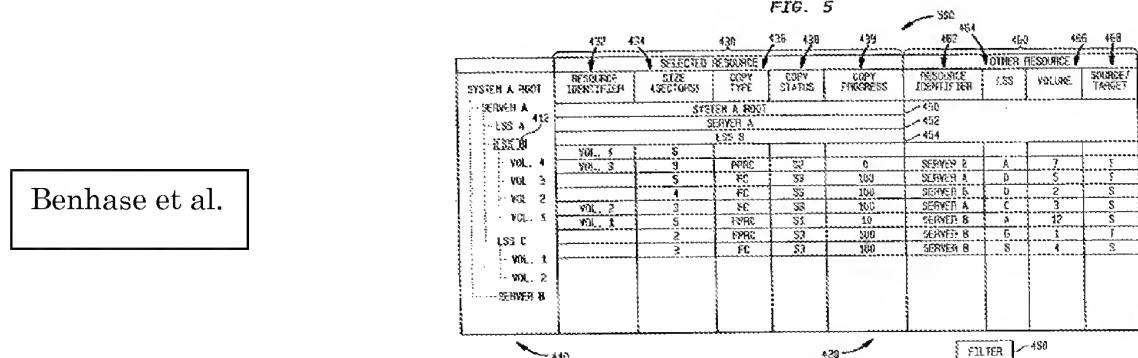


FIG. 5



III. Prior Art Anticipation of Claimed Limitations.

As to independent **claim 1**, *Benhase et al.* teach a computer implemented method of generating a graphical portion of a graphical user interface (user interface, para [0006]) comprising: illustrating, in the same graphical portion (interface display 400, para. [0037]), a tree hierarchy (tree, para. [0037]) and a table of values (table with...information associated with nodes, para. [0037]); including, in the tree hierarchy, one or more nodes belonging to a first node-category (Logical Subsystem LLS, para. [0037]) and one or more nodes belonging to a second node-category and corresponding to a group of elements (e.g. vol. 1-4, Fig 4; *see also* N4-N7 and N9-N10, para. [0037]); adaptively arranging the table, in response to a selection of one of the first-category nodes via the GUI (user selecting node with e.g. a mouse and information being presented about selected node, para. [0038]), to include one or more rows that present information about the one or more second-category nodes (e.g. resources identifier, para. [0038]; *see also* 434 in Fig. 4), respectively, and that report to the selected one of the first-category nodes, and two or more columns representing parameters of the one or more second-category nodes, respectively (*see e.g.* Fig. 3 and 4); and showing, in the rows, sums of individual values exhibited by elements of the group, respectively (e.g. column 434 provides a size of the child resources, para. [0038]).

As to dependent **claim 2**, *Benhase et al.* further teach including, in the tree hierarchy, at least one node belonging to a third node-category (e.g. Node N1 in Fig. 3); wherein the one or more first-category nodes (e.g. Node N2, Fig. 3) report to the at-

least-one third-category node, respectively (also see Fig. 4 where LSS, A, B, and C report to Server A).

As to dependent **claim 3**, *Benhase et al.* further teach the elements in the tree hierarchy to represent a component in a storage domain (i.e. storage resources, [0036]).

As to dependent **claim 4**, *Benhase et al.* further teach that the parameter of the storage-domain component includes one of the following: a number of LUNs to which the element has access (logical unites 434, Fig. 4); an amount of storage space made available to the element (logical unites 434, Fig. 4); and a cost per unit time of an amount of storage made available to the element (copy progress 439, Fig. 4).

As to dependent **claim 5**, *Benhase et al.* further teach a column representing the storage-space-amount parameter (see size column 434, Fig. 4). They also teach that the row is associated via the second-category node (i.e. vols 1-4, Fig 4.) with the respective group of elements shows in a cell intersecting the storage-space-amount-parameter column a sum of the storage space represented by the elements of the group (Fig. 4 shows the volume rows all intersect with the size column).

As to dependent **claim 6**, *Benhase et al.* further teach splitting the graphical portion into a first pane (first display region 410, para. [0037]) and a second pane (second display region 420, para. [0037]); the first pane containing the tree hierarchy (including tree, para. [0037]); and the second pane containing the table (table with rows, para. [0037]).

As to dependent **claim 7**, *Benhase et al.* further teach the first type of row (e.g. rows with the resource identifier 432, Fig. 4) and the second type of row that presents information about a selected first-category node (Additional rows identifying the parent nodes of selected resources [0040], see also Fig. 4).

As to dependent **claim 8**, *Benhase et al.* further teach the second-type row with a cell corresponding to each of the columns respectively (see intersections delineated by the column lines intersection through the rows, Fig. 4) and show cells of the second-type row with to be a sum of the values that correspond to cells of the first-type rows (See total size column 434, Fig. 4).

As to dependent **claim 9**, *Benhase et al.* further teach illustrating a title for the table, the title being an at least partial pathname to the selected one of the first-category nodes (node indicia, lines 12-14, [0040]), the pathname including an identifier of a third level node (system element 452 [0040], see also Fig 4.) to which the selected one of the first-category nodes reports (See Fig 4. where first category nodes report to third level nodes, i.e. LLS a,b, and c report to server A).

As to dependent **claim 10**, *Benhase et al.* further teach that the tree hierarchy concerns various-type components of a storage domain (Storage: Lines 11-15, para [0036]), the third-category node represents the total instances of a particular type among the storage-domain components (particular type, [0037]), and each of the second-category nodes represents a subset of the total instances of the particular type of storage-domain component (e.g. volumes, lines 12-13, [0037]).

As to dependent **claim 11**, *Benhase et al.* further teach that the table is formed of multiple tabbed sub-tables (header or title of each column is a tab, that can be clicked to present a new resorted table, para. [0042]).

As to independent **claim 12**, *Benhase et al.* teach a method of generating a graphical portion of a graphical user interface (user interface, para [0006]), the graphical portion concerning various components of a storage domain, the method comprising: illustrating a tree hierarchy (tree, para. [0037]); including, in the tree hierarchy, two nodes belonging to a first node-category (Logical Subsystem LLS, para. [0037]), the first-category node representing the total instances of a particular type among the storage-domain components, the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application ("...the node indicia may represent various storage resources, such as a storage server, logical storage resources, volumes, disks, and the like...", para. [0036]; See also Fig. 4), and including, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to the first-category node (e.g. vol 1-4, Fig 4; *see also* N4-N7 and N9-N10, para. [0037]), each second-category subset node representing a subset of the total instances of the particular type of storage-domain component (*see* Fig. 4).

Claim 14, fails to further limit claim 12 and is (in addition to the reasons set forth above) rejected in view of *Benhase et al.* for by the same reasons set forth in regard to claim 12.

As to dependent **claim 15**, *Benhase et al.* further teach that the generation means is further operable to dispose one or more instance nodes belonging to a third node-category reporting to the second-category subset nodes respectively (see Fig. 4 where LSS, A, B, and C report to Server A).

As to dependent **claim 16**, *Benhase et al.* further teach illustrating, in the tree hierarchy, a node a third node-category corresponding to the storage-domain as a whole (In 12-13, para. [0037]), each first-category node reporting to the third-category node (Logical Subsystem, para. [0037] reporting to Server as shown in e.g. Fig. 3-4).

As to independent **claim 17**, this claim is a product-by-process claim where the applicant intends for the product itself to depend on the process for making it. Additionally, this claim is directed toward a product defined by a process identically claimed in claim 1. Thus, this claim is analyzed as previously discussed with respect to claim 1 below.

As to dependent **claims 18-27**, these claims are product-by-process claims where the applicant intends for the product itself to depend on the process for making it. Additionally, these claim is directed toward a product defined by a processes identically claimed in claims 2-11, respectively. Thus, these claims are analyzed as previously discussed with respect to claims 2-11 above.

As to independent **claim 28**, this claim is a product-by-process claim where the applicant intends for the product itself to depend on the process for making it. Additionally, this claim is directed toward a product defined by a process identically

claimed in claim 1. Thus, this claim is analyzed as previously discussed with respect to claim 12 below.

As to dependent **claims 30-32**, these claims are product-by-process claims where the applicant intends for the product itself to depend on the process for making it. Additionally, these claim is directed toward a product defined by a processes identically claimed in claims 14-16, respectively. Thus, these claims are analyzed as previously discussed with respect to claims 14-16 above.

As to independent **claim 33**, *Benhase et al.* teach an apparatus for managing components of a system, the apparatus comprising: a host operatively connected to the components of system (elements 120 and 130, Fig. 1); and manager means for running on the host and for managing the components of the system in part by producing a graphical user interface (manager, para [0025]); and generation means for generating a graphical portion of the GUI (Fig. 1), the generation means being operable to portray, in the same graphical portion, a tree hierarchy (Fig. 4-8) and a table of values; portray, in the tree hierarchy, one or more nodes belonging to a first node-category (element 412, Fig. 4) and one or more nodes belonging to a second node-category (i.e. vols 1-4, Fig 4.) and corresponding to a group of elements (Fig. 4); adaptively dispose the table, in response to a selection of one of the first-category nodes via the GUI, to include one or more rows that present information about the one or more second-category nodes, (user selecting node with e.g. a mouse and information being presented about selected node, para. [0038]), and that report to the selected one of the first-category nodes, and two or more columns representing parameters the one or more the second-category nodes,

respectively; and portray, in the rows, sums (e.g. column 434 provides a size of the child resources, para. [0038]). of individual values exhibited by elements of the group, respectively (*see e.g. Fig. 3 and 4*).

As to dependent **claims 34-36**, *Benhase et al.* further teach the system and elements within to be storage domain (i.e. storage resources, [0036]) and that a parameter of the storage-domain component includes one of the following: a number of LUNs to which the element has access (logical unites 434, Fig. 4); an amount of storage space made available or space amount (logical units 434, Fig. 4); and a cost per unit time of an amount of storage made available to the element (copy progress 439, Fig. 4) and a row associated via the second-category node with the respective group of elements shows in a cell intersecting the storage-space-amount-parameter column a sum of the storage space represented by the elements of the group (Fig. 4 shows the volume rows all intersect with the size column).

As to dependent **claim 37-38**, *Benhase et al.* further teach that the rows of the table are a first type of row (e.g. rows with the resource identifier 432, Fig. 4); and the generation means is further operable to dispose, in the table, a second type of row that presents information about the selected one of the first-category nodes (Additional rows identifying the parent nodes of selected resources [0040], *see also Fig. 4*). and that the second-type row has a cell corresponding to each of the one or more columns and for each of the one-or-more cells of the second-type row, a sum of the values in the corresponding cells of the first-type rows (e.g. vol 1-4, Fig 4; *see also* N4-N7 and N9-N10, para. [0037]).

As to independent **claim 39**, *Benhase et al.* teach an apparatus for managing components of a storage domain, the apparatus comprising: a host operatively connected to the components of the storage domain (elements 120 and 130, Fig. 1); and storage area manager means for running on the host and for managing the components of the storage domain (manager, para [0025]); in part by producing a graphical user interface (Fig. 4) and generation means for generating a graphical portion of the GUI, the graphical portion concerning various components of a storage domain (Fig. 4-8), the generation means being operable to portray a tree hierarchy (hierarchy, Fig. 4-8); portray, in the tree hierarchy, a node belonging to a first node-category, the first-category node representing the total instances of a particular type among the storage-domain components, the at least two nodes representing at least two different ones from among the following types of storage domain components including a storage area network (SAN), an interconnect device, a storage device, a host, or a business application ("...the node indicia may represent various storage resources, such as a storage server, logical storage resources, volumes, disks, and the like...", para. [0036]; See also Fig. 4) and portray, in the tree hierarchy, one or more subset nodes belonging to a second node-category reporting to the first-category node, each second-category subset node representing a subset of the total instances of the particular type of storage-domain component sums (e.g. column 434 provides a size of the child resources, para. [0038]).

As to substantially identical independent **claim 41**, this claim is rejected for the same reasons set forth in claim 14.

As to dependent **claim 42**, *Benhase et al.* further teach that the generation means is further operable to dispose one or more instance nodes belonging to a third node-category reporting to the second-category subset nodes respectively (see Fig. 4 where LSS, A, B, and C report to Server A).

As to dependent **claim 43**, *Benhase et al.* further teach that the generation means is further operable to dispose a node a third node-category corresponding to the storage-domain as a whole, each first-category node reporting to the third-category node(Logical Subsystem, para. [0037] reporting to Server as shown in e.g. Fig. 3-4).

As to substantially identical independent **claim 44**, this claim is rejected for the same reasons set forth in claim 1.

As to dependent **claim 45**, *Benhase et al.* further teach, e.g., “resources identifier,” (para. [0038]; see also 434 in Fig. 4).

RESPONSE TO ARGUMENTS

7. Applicant arguments, see pp. 16-19 filed 1/9/200, with respect to the 37 C.F.R. §1.131 declaration has been considered but is ineffective to overcome the *Benhase et al* reference.

CONCLUSION

8. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, are considered pertinent to applicant's

disclosure. Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

- [1] Pg-Pub 2005/0114790
- [2] Pg-Pub 2004/0085347
- [3] Pat No. 5,832, 496

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samir Termanini/
Examiner, Art Unit 2178

/Stephen S. Hong/
Supervisory Patent Examiner, Art Unit
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